

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

Claims 1-26 (canceled).

27. (New) An atomization system for charging a chemical reformer for obtaining hydrogen, comprising:

a supporting device; and

at least one metering device accommodated in the supporting device for metering fuel into a temperature-adjusted substance stream, wherein the metering device introduces the fuel directly into the temperature-adjusted substance stream without interpolation of a supply line.

28. (New) The atomization system of claim 27, wherein the metering device includes at least one opening for metering in fuel.

29. (New) The atomization system of claim 27, wherein the metering device includes a fuel injector that ejects fuel in a manner that is metered.

30. (New) The atomization system of claim 29, wherein the fuel injector ejects fuel in a manner that is swirled.

31. (New) The atomization system of claim 30, wherein the fuel injector is a high-pressure fuel injector operating with fuel pressures of 20 to 150 bar.

32. (New) The atomization system of claim 27, wherein the temperature-adjusted substance stream flows through the supporting device.

33. (New) The atomization system of claim 27, wherein the metering device is thermally insulated from the supporting device.

34. (New) The atomization system of claim 33, further comprising:

an insulating body, the metering device being thermally insulated by the insulating body.

35. (New) The atomization system of claim 34, wherein the insulating body is at least partly made of a ceramic material.
36. (New) The atomization system of claim 27, wherein the metering device is insulated from the supporting device by a first gap.
37. (New) The atomization system of claim 34, wherein the metering device is insulated from the insulating body by a first gap.
38. (New) The atomization system of claim 34, wherein the metering device contacts the insulating body only to the extent to prevent the metering device from deflecting with respect to a longitudinal axis.
39. (New) The atomization system of claim 37, wherein the supporting device includes a primary housing, through which the temperature-adjusted substance stream flows, and an upper housing part not in direct contact with the primary housing.
40. (New) The atomization system of claim 39, wherein the upper housing part is insulated from the primary housing by a second gap.
41. (New) The atomization system of claim 39, wherein the upper housing part only directly contacts the insulating body.
42. (New) The atomization system of claim 39, further comprising:
fixing elements which mutually lock the housing and the upper housing part in place.
43. (New) The atomization system of claim 42, wherein the fixing elements are thermally insulated from at least one of the primary housing and the upper housing part by further insulating elements.
44. (New) The atomization system of claim 43, wherein the further insulating elements are at least partly made of a ceramic material.
45. (New) The atomization system of claim 39, wherein only the upper housing part supports the metering device.
46. (New) The atomization system of claim 39, further comprising:
a seal between the metering device and the upper housing part that seals the first gap.

47. (New) The atomization system of claim 46, wherein the seal is at least partly made of an elastomer.
48. (New) The atomization system of claim 27, wherein the metering device meters fuel into a mixing area.
49. (New) The atomization system of claim 48, wherein the temperature-adjusted substance stream is fed one of radially and at least partly tangentially into the mixing area through a supply line.
50. (New) The atomization system of claim 49, wherein the primary temperature-adjusted substance stream fed from the supply line into the mixing area is directed away from the metering device as it enters the mixing area.
51. (New) The atomization system of claim 39, wherein the primary housing includes a recess for inhibiting heat conduction.
52. (New) The atomization system of claim 27, wherein the supporting device includes an outer surface having an area that increases at least one of by increments and continuously, starting from a flow outlet.
53. (New) The atomization system of claims 48, wherein the supporting device includes an outer surface having an area that increases counter to a direction of flow prevailing within the supporting device, starting from the mixing area.